

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patentee: Leonid, Aizikovitch SJMAENOK

Patent No.: 6,359,969

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Title: FILTER FOR EXTREME ULTRAVIOLET LITHOGRAPHY

Mail Stop Reissue
Commissioner for Patents
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REISSUE DECLARATION

I, Leonid SJMAENOK of Nieuwegein, The Netherlands and citizen of The Netherlands, hereby declare that I am the original and sole inventor of the subject matter of U.S. Patent No. 6,359,969 (the '969 patent) entitled "FILTER FOR EXTREME ULTRAVIOLET LITHOGRAPHY", which issued March 19, 2002 from U.S. Patent Application No. 09/641,455, filed, on August 18, 2000, as a continuation application of PCT Patent Application No. PCT/NL99/00090, filed on February 19, 1999, which claimed priority to Dutch Patent Application No. NL 1008352, filed on February 19, 1998.

I believe that the original '969 patent is, through error without deceptive intention, partially inoperative by virtue of at least claiming less than I had the right to claim.

Specifically, the recitation in claim 12 that "the plates are directed radially from the radiation source" conflicts with the earlier recitation in claim 12 that the "plurality of plates are positioned substantially parallel in relation to one another." Therefore, I believe the original '969 patent is partly inoperative by reason of claiming less than I had a right to claim. Accordingly, I

amended independent claim 12 to recite that “the plates are directed away from the radiation source.” Furthermore, I submitted dependent claims 13-21, further defining the filter recited in claim 12.

Further, the original ‘969 patent did not include an independent claim defining a filter to suppress undesired atomic and microscopic particles from a radiation source, the filter comprising a plurality of foils or plates having a surface configured to trap atomic and microscopic particles thereon, wherein each foil or plate essentially extends away from the radiation source.

The original ‘969 patent, in error without any deceptive intent on my part, only included a filter claim that recited a plurality of plates positioned substantially parallel in relation to one another and failed to include an independent claim to a filter with a plurality of foils or plates essentially extending away (e.g., extending radially) from the radiation source. Therefore, independent claim 22 has been added to correct this error by reciting a filter comprising, among other things, a plurality of foils or plates essentially extending away from the radiation source and so I believe the original ‘969 patent is partly inoperative by reason of claiming less than I had a right to claim. The original ‘969 patent also did not include dependent claims defining additional details of such a filter. Accordingly, dependent claims 23-39 have been added.

The original ‘969 patent also did not include an independent claim defining a lithographic apparatus comprising a filter comprising a plurality of foils or plates having a surface configured to trap thereon atomic and microscopic particles. Therefore, I have added independent claim 40 and I believe the original ‘969 patent is partly inoperative by reason of claiming less than I had a right to claim.

The original ‘969 patent, in error without any deceptive intent on my part, only included a filter claim and an apparatus comprising a radiation source, a processing organ and a filter between the radiation source and the processing organ and failed to include an independent claim to a lithographic apparatus comprising a filter and an optical element. Therefore, independent claim 40

has been added to correct this error by reciting a lithographic apparatus comprising, among other things, a filter and an optical element and so I believe the original '969 patent is partly inoperative by reason of claiming less than I had a right to claim. The original '969 patent also did not include dependent claims defining additional details of such a lithographic apparatus. Accordingly, dependent claims 41-60 have been added.

Additionally, the original '969 patent did not include an independent claim defining a radiation source system comprising an extreme ultraviolet radiation plasma source and a filter to suppress undesired atomic and microscopic particles. Therefore, I have added independent claim 61 and I believe the original '969 patent is partly inoperative by reason of claiming less than I had a right to claim.

The original '969 patent, in error without any deceptive intent on my part, only included a filter claim and an apparatus comprising a radiation source, a processing organ and a filter between the radiation source and the processing organ and failed to include an independent claim to a radiation source system comprising an extreme ultraviolet radiation plasma source and a filter to suppress undesired atomic and microscopic particles. Therefore, independent claim 61 has been added to correct this error by reciting a radiation source system comprising among other things, an extreme ultraviolet radiation plasma source and a filter to suppress undesired atomic and microscopic particles and so I believe the original '969 patent is partly inoperative by reason of claiming less than I had a right to claim. The original '969 patent also did not include dependent claims defining additional details of such a radiation source system. Accordingly, dependent claims 62-68 have been added.

I hereby declare that every error in the '969 patent which was or sought to be corrected in the present reissue application, and which is not considered to be covered by the prior reissue declaration submitted in this application, was inadvertent and arose without any deceptive intent on

my part and, to the best of my knowledge, on the part of the assignee of the '969 patent, ASML Netherlands B.V.

I hereby claim priority benefit under 35 U.S.C. § 119 or 120 and/or 365 to U.S. Patent Application No. 09/641,455 filed August 18, 2000, to PCT Application No. PCT/NL99/00090 filed on February 19, 1999, and to Dutch Patent Application No. NL 1008352 filed February 19, 1998, wherein this application is a reissue application of U.S. Patent Application No. 09/641,455, which is in turn a continuation of PCT Application No. PCT/NL99/00090, which claims priority to Dutch Patent Application No. NL 1008352. Insofar as the subject matter disclosed and claimed in this application is in addition to that disclosed in the applications to which priority is claimed, I acknowledge the duty to disclose all information known to me to be material to patentability as defined in 37 C.F.R. § 1.56 which became available between the filing date of the applications to which priority is claimed and the effective filing date of this application.

I have reviewed and understand the contents of this declaration and the attached specification, including the claims as amended and added as specifically referred to in this declaration and I believe am the original and first inventor of the subject matter which is claimed and for which a patent is sought.

I do not know, nor believe, that the claimed invention was ever known or used in the United States before the invention thereof, or patented or described in any printed publication in any country before the invention thereof. I also acknowledge my duty to disclose to the U.S. Patent and Trademark Office all information known to be material to patentability of this re-issue application as defined in 37 C.F.R. § 1.56.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that

such willful false statements may jeopardize the validity of the application or any patent issued thereon.

And I hereby appoint Pillsbury Winthrop Shaw Pittman LLP, 1650 Tysons Boulevard, McLean, VA 22102, telephone number (703) 770-7900 (to whom all communications are to be directed), and persons of that firm who are associated with USPTO Customer No. 00909 individually and collectively the attorneys to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith and with the resulting patent, and I hereby authorize them to delete from that Customer No. names of persons no longer with their firm, to add new persons of their firm to that Customer No., and to act and rely on instructions from and communicate directly with the person/assignee/attorney/firm/organization who/which first sends/sent this case to them and by whom/which I hereby declare that I have consented after full disclosure to be represented unless/until I instruct the above firm and/or a below attorney in writing to the contrary.



Leonid, Aizikovitch SJMAENOK

04-07-2010

Date